FE279

Diagram No. 905-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey ..... Field Examination

Field No. PE-5-1-85

Registery No. FE-279

LOCALITY

State ..... U.S.Virgin Islands

General Locality ..... St. Thomas

Sublocality ..... West Gregerie Channel

.....

1985

CHIEF OF PARTY
CDR T.A. Theberge

.....

LIBRARY & ARCHIVES

DATE ..... February 9, 1987

☆U.S. GOV. PRINTING OFFICE: 1985—566-054

FE279

ACRG
CHTS
25649 - TO SIGN OFF SEE "RECORD OF APPLICATION"
25641-nc

NOAA FORM 77-28 (11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

FE-279

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

PE-5-1-85

State ~~St. Thomas~~ U. S. VIRGIN ISLANDS

General locality ~~U. S. Virgin Islands~~ ST. THOMAS

Locality West Gregerie Channel, ~~Charlotte Amalie Harbor~~

Scale 1:5,000 Date of sur 25- ov. 1985

Instructions dated 27 Sept. 1985 [illegible]191-PE-85

Vessel PEIRCE survey launches PE-1 (VESNO: 2831), PE-2 (VESNO: 2832)

Chief of party A. E. Theberge, CDR NOAA

Surveyed by JAH, EAL, VDR

Soundings taken by echo sounder, ~~hand lead pole~~ DSF-6000N & HEADLINE

Graphic record scaled by DAW, WRM, EAL, VDR, MJB, MHB

Graphic record checked by DAW, WRM, EAL, VDR, MJB, MHB

Protracted by _____ Automated plot by Hydroplot (PEIRCE) XYNETICS 1201 PLOTTER (AMC)

Verification by R. L. KEENE

Soundings in ~~fathoms~~ feet at ~~MLW~~ MLLW

REMARKS: All times are in Coordinated Universal Time

NOTES IN DESCRIPTIVE REPORT WERE MADE IN RED DURING OFFICE PROCESSING.

AWOIS/SURF MSM 2/19/87

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1976—665-661/1222 REGION NO. 6

Descriptive Report
To Accompany Field Examination
PE-5-1-85
Scale: 1:5,000
A. E. Theberge, CDR NOAA
Chief of Party

A. PROJECT

This survey was accomplished under project instructions OPR-I191-PE-85, St. John, U.S. Virgin Islands, dated 27 Sept. 1985; Change No. 1, dated 3 Oct. 1985; Change No. 2, dated 14 Nov. 1985; Change No. 3, dated 25 Nov. 1985; and a memorandum dated 14 Feb. 1986. This field examination was performed by the NOAA Ship PEIRCE, S-328.

B. AREA SURVEYED

The area surveyed is the area known as "Sub Base", West Gregerie Channel, Little Krum Bay; between St. Thomas Island and Water Island; between latitudes N18°19.5' and N18°20.2'; and between longitudes W064°56.8' and W064°57.5'.

Main-scheme hydrography was run at 25-meter line spacing to ensure dense bottom coverage.

The survey work was performed between days 329 and 332 in 1985.

C. SOUNDING VESSELS

All soundings obtained in 1985 for this field examination were obtained on PEIRCE survey launches PE-1, VESNO: 2831, and PE-2, VESNO: 2832, and PE-4, VESNO: 2834. All survey records are annotated with the aforementioned identifiers as appropriate. VESNO 2831 AND 2832 ARE TYPE I, JENSEN LAUNCHES.

All soundings taken from PE-4 were lead line soundings.

No unusual sounding vessel configurations nor problems were encountered.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Both survey launches used Raytheon DSF-6000N echo sounders during this survey.

Launch	Day	Sdg Machine S/N
PE-2	330	B050N
PE-2	331	B050N & A112N
PE-1	332	A108N

The DSF-6000N maintains the depth initial at zero at all times. The provisional instructions for operating the DSF-6000N were used as guidelines for use and calibration of the echo sounders. When possible, bar checks were taken once daily at 5-ft. increments down and up to a maximum depth of 45 ft.

All soundings taken from PE-4 were lead line soundings.

Settlement and squat tests for both launches were run in San Juan Harbor, P. R. in October 1985.

Nansen casts were taken by the NOAA Ship PEIRCE for the determination of velocity of sound through the sea water.

Day	Position
316	N18°19'42", W064°50'00"
326	N18°19'42", W064°49'23"
334	N18°15'06", W064°58'00"

The soundings on the final field sheet have been plotted using predicted tide correctors based on the Charlotte Amalie, St. Thomas tide station.

E. HYDROGRAPHIC SHEETS (FIELD SHEETS)

Field sheets were prepared on the NOAA Ship PEIRCE using a pdp 8/e computer and a Houston Instruments Complot plotter.

Approved tide correctors were requested from the Sea and Lake Surveys Branch, Rockville, Md. The final field sheet is plotted at a scale of 1:2,500 to reduce congestion.

All data and field records were forwarded to the Hydrographic Surveys Branch at the Atlantic Marine Center for verification.

F. CONTROL STATIONS

No new horizontal control stations were established for this survey. SEE also SECTION 4.d. of the EVALUATION REPORT.

G. HYDROGRAPHIC POSITION CONTROL

The Mini-Ranger Falcon 484 was used for hydrographic position control in range/range configurations. Average baseline correctors were applied to the Mini-Ranger ranges, except as noted below. Copies of the baseline calibration data are included with the field records. SEE also SECTION 4.e. of the EVALUATION REPORT.

Due to extremely high and low signals strengths; topography; water-borne traffic; and structural interference, predominantly in the

area of the new municipal pier, some adjustments to certain positions were made to correlate with the hydrographer's field notes. The adjustments were made by recomputing the erroneous positions using RK300, Utility Computations. The difference in meters between the computed position and the position obtained by the Mini-Ranger was applied through the long word on the corrector tape.

These computations are included in the field records.

H. SHORELINE SEE also section 2.b. of the Evaluation Report.

No shoreline manuscripts were provided.

The shoreline in the Little Krum Bay ("Sub Base") has changed markedly from what is portrayed on the chart. The shoreline on the final field sheet was plotted from R/Az fixes taken in the field using a HP-3810B total station instrument. Changes to the shoreline are shown in red.

The shoreline in this area should be changed on the chart to reflect the current conditions. However, some construction is still in progress. A copy of the Brown Bay Marine plan showing the expected shoreline after construction is included with the survey records.

All field data for the shoreline changes were obtained using PE-4, VESNO: 2834 and a HP-3810B total station instrument.

I. CROSSLINES

Four lineal nautical miles of crosslines were run, which is equivalent to 22 percent of the total lineal nautical miles of main-scheme hydrography.

The crosslines agree with the main-scheme hydrography within 2 ft. in depths from 30 to 50 ft.

J. JUNCTIONS SEE also section 5. of the Evaluation Report.

No junctions were performed as part of this field examination.

K. COMPARISON WITH PRIOR SURVEYS SEE also section 6. of the Evaluation Report.

Comparisons with prior surveys were not required by the project instructions for this field examination.

L. COMPARISON WITH THE CHART SEE also section 7. a. of the Evaluation Report.

Chart number 25649, the 13th Edition, dated August 1980 was used for comparison with this field examination.

This field examination was conducted because of the extensive changes in the area known as the "Sub Base" in Little Krum Bay. These changes render chart 25649, in the area of Little Krum Bay, obsolete. CONCUR

Some construction along the shoreline is still in progress, therefore, further modifications to the charted shoreline in the area will be required in a year or two. SEE also SECTION 9. of THE EVALUATION REPORT.

The area has been dredged recently; in fact, the dredge was still in the area necessitating leaving a hole in the hydrography near the shoreline at the NE corner of the survey area. The Port Authority anticipates routine maintenance dredging to ensure clear water deeper than 30 ft. in this area for the regular cruise ship traffic.

The charted soundings agree with this field examination in three small areas only: between latitudes N18°19'39" and N18°19'57", and between longitudes W064°57'09" and W064°57'17"; between latitudes N18°19'55" and N18°20'02", and between longitudes W064°56'54" and W064°56'59"; and between latitudes N18°20'06" and N18°20'30", and between longitudes W064°57'07" and W064°57'16".

There are nine soundings which can be moved laterally to provide more accurate information about the bottom. These soundings are scattered about the survey area, not grouped together in one area. The rest of the soundings should be replaced because the recent dredging project has changed those depths.

Several soundings in the vicinity of position N18°20'03", W064°57'18" are now above the high water line and on the new municipal pier and should be removed from the chart. CONCUR

Five charted soundings in two different areas are charted where pleasure crafts, or a dredge, or commercial crafts were moored during this survey causing holes. Therefore, disposition of these soundings cannot be recommended by the hydrographer.

The 28-ft. shoal in the vicinity of N18°~~57'10.5~~ 19'40.5", W064°~~19'40.5~~ 57'10.5" still exists as charted. Retain this shoal on the chart. CONCUR

The 30-ft. depth curve along the east side of West Gregerie Channel between latitudes N18°19'43" and N18°20;06" has moved east as a result of the recent dredging in the area. The charted depth curve in this area should be changed as indicated by this field examination.

The 30-ft. depth curve between latitudes N18°20'00" and N18°20'08", and between longitudes W064°56'42" and W064°56'59" has changed due to the recent dredging. A dredge was still in this area at the time of this field examination, therefore this section of the of the 30-ft depth curve could recede further. The charted 30-ft. depth curve in this area should be changed as indicated by this field examination.

There are approximately four shoal soundings in the vicinity of N18°19'46.5", W064°57'03.0" which indicate possible isolated peaks in water depths of 30 to 40 ft. The sounding rolls indicate that these soundings are on the edge of the island shelf, not isolated peaks. The plotted positions show these soundings surrounded by deeper water. There is no indisputable evidence that the positions or depths are

wrong. As explained earlier, positioning problems were prevalent and these soundings are most likely plotted in the wrong places. The existence of the pinnacles which are indicated by this survey in the area of N18°19'46.5", W064°57'03.0" is doubtful. The hydrographer recommends further development of the area. DO NOT CONCUR. ERRACTIC POSITIONING RATES. DATA REJECTED. HYDROGRAPHY IN AREA DISPROVES SOUNDINGS.

The dangerous submerged wreck charted at N18°19'48", W064°57'06" is within the dredging project area. The Port Authority informed the Commanding Officer that that area had been dredged and is now clear. This field examination confirms the port authority's statement. The charted position of the wreck is within an area of reduced line spacing and no indication of the wreck was found on the sounding roll. This dangerous submerged wreck symbol should be removed from the chart. SEE also SECTION 7.a.1) of THE EVALUATION REPORT.

Remove the dangerous submerged wreck charted near N18°20'06", W06~~6~~64°57'12". SEE also SECTION 4.f. of THE EVALUATION REPORT.

Add to the chart a visible wreck at N18°20'09.30", W064°56'41.09"; azimuth: 344°. SEE also SECTION 7.a.3) of THE EVALUATION REPORT.

The curved quay in Crown Bay, beginning at N18°20'15", W064°57'00", is complete and should not be shown as a dashed line on the chart. The word "Being Filled" and "Under Construction" should be removed from the chart. See the final field sheet for the most recent shoreline changes in Crown and Little Krum Bays.

The word "Bulkhead" charted near N18°20'15.7", W06456'59.0" should be changed to "Quay".

The hydrographer recommends complete recompilation of the chart in the vicinity of Little Krum Bay using this field examination. A chart comparison overlay is included as part of the field records of this survey, with the hydrographer's recommendations on it, to assist the reviewers and chart compilers. CONCUR

M. ADEQUACY OF THE SURVEY

This field examination if sufficiently complete to meet the purpose as explained in the project instructions, Change No. 3, dated 25 November 1985.

N. AIDS TO NAVIGATION SEE also SECTION 4.i. of THE EVALUATION REPORT.

Two fixed and two floating aids to navigation were located by hydrographic methods during this field examination.

Buoy "3" charted near N18°19'56.2", W064°56'38.6" is positioned correctly on the chart. This buoy is number 2041 in the Coast Guard Light List, Vol. II, 1985. The Light List description should be changed to: in 32 ft. of water 100 yd. NE of Banana Pt. The above position should be added.

Buoy "5" charted at N18°19'45.7", W064°57'21.4" is positioned correctly on the chart. This buoy is #2048 in the Coast Guard Light

List, Vol. II, 1985. There is no position for this buoy in the Light List. The description in the Light List should be changed to: in 23 ft. of water.

Light "6" charted at N18°19'59.0", W064°56'534" is charted correctly. This light is #2049 in the Coast Guard Light List, Vol. II, 1985. The Light List position is correct, however the description should be changed to: in 11 ft. of water.

A new mooring platform has been built at position N18°20'00.4", W064°57'07.3". This structure is not in the Coast Guard Light List. This platform is in water that is 37 ft. deep on the north side and 41 ft. deep on the south side. This platform should be charted. This platform has a privately maintained red light near its center. No light characteristics were observed during this field examination.

O. STATISTICS

PE-1

Number of positions	55
Total LNMi	3

PE-2

Number of positions	374
Total LNMi	22.3

No bottom samples, current observations, nor magnetic observations were taken as part of this survey.

P. MISCELLANEOUS

The area encompassed by this field examination has been dredged recently. Dredging, although limited, and construction along the shoreline are still in progress. This construction will require another field investigation to update the charted shoreline again in the near future.

Q. RECOMMENDATIONS

The shoreline in the Little Krum Bay area should be changed on the chart to reflect the current conditions. CONCUR

The soundings in the Little Krum Bay area should be completely recompiled from this field examination. CONCUR

The 28-ft. shoal charted near N18°57'10.5", W064°19'40.5" should be retained on the chart. CONCUR ? 64° 57' 10" W4F

The 30-ft. depth curve on the east side of West Gregerie Channel between latitudes N18°19'43" and N18°20'06" and within the area between

latitudes N18°20'00" and N18°20'08" and between longitudes W064°56'42" and W064°56'59" should be changed as indicated by this field examination. The dangerous submerged wreck charted near N18°19'48", W064°57'06" should be removed from the chart. SEE also SECTION 7.a.1) of the EVALUATION REPORT.

Add to the chart a visible wreck at N18°20'09.30", W064°56'41.09"; azimuth: 344°. SEE also SECTION 7.a.3) of the EVALUATION REPORT.

Remove the dangerous submerged wreck charted near N18°20'06", W064°57'12". SEE also SECTION 4.f. of the EVALUATION REPORT.

Further develop the area near N18°19'46.5", W064°57'03.0" to disprove the existence of the isolated pinnacles which are indicated by this survey. DO NOT CONCUR. ERRATIC RATES. DATA REJECTED. HYDROGRAPHY IN AREA DISPROVES SOUNDINGS.

Update the shoreline in Crown and Little Krum Bays as shown on the final field sheet. Remove the words "Being Filled" and "Under Construction" charted near N18°20'11", W064°57'07". CONCUR

The word "Bulkhead" charted near latitude N18°20'15.7", longitude W064°56'59.0" should be changed to "Quay". DO NOT CONCUR.

R. AUTOMATED DATA PROCESSING

Program	Program Name	Version
112	Hyperbolic and R/R Real-Time Plot	10-12-83
116	R/Az Real-Time Plot	10-12-83
201	Grid, Signal, and Lattice Plot	04-18-75
211	Range/Range Nonreal-Time Plot	02-02-81
212	Visual Station Table Load and Plot	04-01-74
216	R/Az Nonreal-Time Plot	02-09-81
300	Utility Computations	10-21-80
330	Reformat and Data check	05-04-76
360	Electronic Corrector Abstract	02-02-76
500	Predicted Tide Generator	11-10-72
530	Layer Correction For Velocity	05-10-76
602	Extended Line Oriented Editor	12-08-82
612	Line Printer Listing	03-22-78
VELTAB	Velocity Table Program	12-01-84

S. REFERRALS TO REPORTS

Coast Pilot Report, OPR-I191-PE-85

SIGNAL TAPE ST. THOMAS

001	6	18	20	11799	064	56	14565	139	0063	000000	HASSEL, 1918
002	6	18	19	54581	064	56	41520	139	0001	000000	BAN, 1918
003	6	18	19	45400	064	57	25849	139	0002	000000	TOP, 1918
004	6	18	20	12706	064	56	18799	139	0000	000000	CHIMNEY, 1918
005	6	18	20	13389	064	56	34459	139	0075	000000	BELVEDERE 2, 1918

Two non-floating aids to navigation were positoned by hydrographic methods during this survey.

No landmarks were positioned during this survey.

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [x] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [ ] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [x] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office): PEIRCE, S328

STATE: St. Thomas U.S.V.I.

LOCALITY: West Gregerie Channel, Charlotte Amalie Harbor

DATE: 11/85

The following objects HAVE [x] HAVE NOT [ ] been inspected from seaward to determine their value as landmarks.

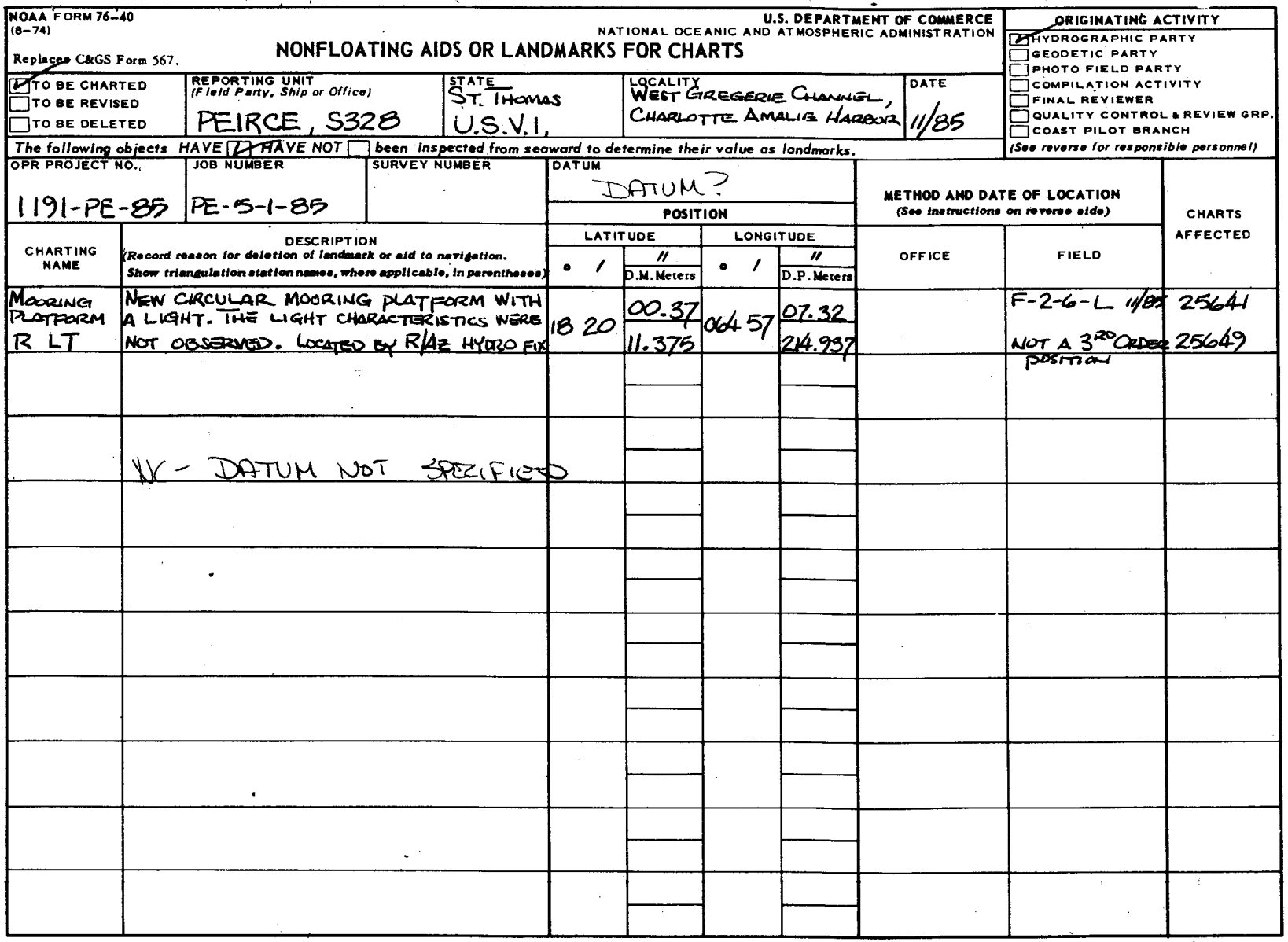
OPR PROJECT NO.: 1191-PE-85

JOB NUMBER: PE-5-1-85

SURVEY NUMBER:

DATUM: DATUM?

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
Mooring Platform R LT	New circular mooring platform with a light. The light characteristics were not observed. Located by R/Az hydro fix	18 20	00.37 11.375	064 57	07.32 24.937		F-2-6-L 11/85 Not a 3RD Order position	25641 25649
	NC - Datum not specified							



RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	DALE ROSS	☐ PHOTO FIELD PARTY ☑ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	DALE ROSS	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74)

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND
F[illegible]STING STOCK SHOULD BE DESTROYED UPON RE[illegible]PT OF REVISION.

☆ U.S.GPO:1975-0-665-080/1155

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: 05/16/86

Marine Center: Atlantic

OPR: I-191

Hydrographic Sheet: FE-279

Locality: Charlotte Amalie Harbor, St. Thomas, Virgin Islands

Time Period: November 25-28, 1985

Tide Station Used: 975-1639 Charlotte Amalie, VI

Plane of Reference (Mean Lower Low Water): 5.08 ft.

Height of Mean High Water Above Plane of Reference: 0.9 ft.

Remarks: Recommended Zoning:

Zone direct

for Brian K. Lim

Chief, Tidal Datum Quality
Assurance Section

NOAA FORM 76-155
(11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

GEOGRAPHIC NAMES

SURVEY NUMBER

FE-279

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
CAROLINE POINT										1
CROWN POINT										2
LITTLE KRUM BAY										3
RUYTER BAY										4
SAINT THOMAS										5
U.S. VIRGIN ISLANDS (title)										6
WEST GREGERIE CHANNEL										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
				Approved:						18
										19
				Charles E Harrington						20
				Chief Geographer - N/CG2x5						21
				SEP 22 1986						22
										23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: FE-279

Number of positions	467
Number of soundings	1945
Number of control stations	4

	TIME-HOURS	DATE COMPLETED
Preprocessing Examination	22	08 July 86
Verification of Field Data	145	30 Oct 86
Quality Control Checks	59	
Evaluation and Analysis	71	01 Dec 86
Final Inspection	22	01 Dec 86
TOTAL TIME	319	
Marine Center Approval		01 Dec 86

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

APPROVAL SHEET

This survey is complete and adequate for the purpose of a hydrographic field examination as explained in the project instructions. The Commanding Officer continually supervised and examined all work.

APPROVED BY: A. Thibeau 4/14/86

ATLANTIC MARINE CENTER
EVALUATION REPORT

SURVEY NO.: FE-279 FIELD NO.: PE-1-85

U. S. Virgin Island, St. Thomas, West Gregerie Channel

SURVEYED: 25 through 28 November, 1985

SCALE: 1:5,000 PROJECT NO.: OPR-I191-PE-85

SOUNDINGS: RAYTHEON DSF-6000N Fathometer, Leadline

CONTROL: MOTOROLA Mini-Ranger Falcon 484 (Range/Range), HP-3810B Total Station Instrument (Range/Azimuth)

Chief of Party.....A. E. Theberge

Surveyed by.....J. A. Hill
.....E. A. Lake
.....V. D. Ross

Automated Plot by.....XYNETICS 1201 Plotter (AMC)

1. INTRODUCTION

a. A letter from Chief Pilot, Mr. Richard B. Griffin, St Thomas, Virgin Islands has stated that construction in dredge spoil area, in the vicinity of Latitude 18°20'12"N, Longitude 64°57'07"W, has been completed. Completed dredge operation areas charts have also been labeled. Letter and data have been appended to this report.

b. One smooth sheet was generated during office processing and is inserted into the Descriptive Report. This final sheet adequately displays the area covered by this survey.

c. Notes in the Descriptive Report were made in red during office processing.

2. CONTROL AND SHORELINE

a. Control is not adequately discussed in sections F. or G. of the Descriptive Report. See sections 4.e. and 4.f. of this report.

b. Shoreline in brown originates with NOS chart 25649 (13th Edition, 30 Aug 1980) and is for orientation purposes only. Shoreline changes east of Longitude 64°57'22 are discussed by the hydrographer in section H. of the Descriptive Report. Additions or revisions by the hydrographer are shown in red on the present survey.

3. HYDROGRAPHY

a. Soundings at crossings are in excellent agreement and comply with the criteria found in sections 4.6.1 and 6.3.4.3. of the HYDROGRAPHIC MANUAL.

b. The standard depth curves could not be drawn in their entirety; the zero (0) curve was not delineated, the six (6), twelve (12), and eighteen (18) foot curves were not delineated in their entirety because of vessel safety. The thirty-six (36) foot and brown curves were added to better delineate bottom relief.

c. The development of the bottom configuration and determination of least depths is considered adequate with the following exceptions:

1) A twenty-seven (27) foot obstruction in Latitude 18°19'44.88"N, Longitude 64°57'06.20"W was not investigated by the hydrographer. The soundings on the adjacent lines of hydrography on the present survey show depths of thirty-six (36) to thirty-nine (39) feet. See also sections 7.a.1) and 9. of this report.

2) A thirty (30) foot sounding in Latitude 18°20'05.02"N, Longitude 64°57'00.70"W was not investigated by the hydrographer. The soundings on the adjacent lines of hydrography on the present survey show depths of thirty-three (33) to thirty-six (36) feet.

3) Thirty-five (35) and thirty-nine (39) foot soundings in Latitude 18°19'43.23"N, Longitude 64°57'13.73"W, and Latitude 18°19'44.07"N, Longitude 64°57'13.78"W, respectively, were not investigated by the hydrographer. Soundings on adjacent lines of hydrography on the present survey show depths of thirty-eight (38) to fifty-two (52) feet.

Additional lines of hydrography in the vicinity of the soundings discussed above would have provided a better delineation of the bottom configuration. The lack of development of items discussed above does not degrade the overall quality of the survey.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports are adequate and conform to the requirements of the HYDROGRAPHIC MANUAL with the following exceptions:

a. The field unit failed to determine bottom characteristics as required by section 6.7. of the Project Instructions, and sections 1.6.3 and 4.7.1 of the HYDROGRAPHIC MANUAL.

b. The field unit failed to determine a least depth on the thirty (30) foot shoal, and thirty-six (36) foot shoal in the vicinity of Latitude 18°19'40"N, Longitude 64°57'12"W, and Latitude 18°20'03"N, Longitude 64°57'00"W, respectively, as required by section 1.4.3. of the HYDROGRAPHIC MANUAL.

c. The field unit failed to determine a 3rd Order Class 1 or better position for the light on the concrete dolphin near the end of the Municipal Pier. Change No. 3., dated 25 November, 1985, section 6.1.3. of the Project Instructions requires a basic survey to be performed; therefore, the field unit did not meet the requirements in section 4.2.1. of the Project Instructions.

d. Section F. of the Descriptive Report did not provide the required information for the electronic control stations used during survey operations. Section 5.3.4.F. of the HYDROGRAPHIC MANUAL outlines the necessary information to be provided in the Descriptive Report.

e. Section G. of the Descriptive Report did not provide the required information for the electronic control equipment used during survey operations. Section 5.3.4.G. of the HYDROGRAPHIC MANUAL outlines the necessary information to be provided in the Descriptive Report.

f. The field unit failed to investigate Automated Wreck and Obstruction Information System (AWOIS) Item #1266, but stated in section L., page 7. of the Descriptive Report "remove the dangerous submerged wreck charted near Latitude 18°20'06"N, Longitude 064°57'12"W". This wreck originates with 7th Coast Guard District, Local Notice to Mariners 19 of 1977 (LNM 19/77). The fathograms were examined during office processing and no indication of the wreck was found. Numerous phone calls to the Virgin Islands Port Authority in Charlotte Amalie, San Juan, Puerto Rico office of the Corps of Engineers, and the 7th Coast Guard District have provided information that the wreck has been covered with dredge spoil. Considering the extensive construction and dredging in the survey area, it is believed that the wreck does not exist. It is recommended that the charted, dangerous sunken wreck, PA, (5 ft rep 1980), be deleted from the chart.

AWOIS msm 2/19/87

g. The field unit located several items, (hulk, rocks, wreck), while conducting the present survey but failed to discuss the items in the Descriptive Report as required by section 4.5.11. of the HYDROGRAPHIC MANUAL. The items are discussed in section 7.a. of this report.

h. The field unit, while jogging to avoid traffic, created several holidays in survey coverage. The field unit did not run additional lines of hydrography to fill the holidays as required by section 4.5.2. of the HYDROGRAPHIC MANUAL.

i. The field unit failed to locate useful landmarks within the survey area as required by section 4.2.2. of the Project Instructions and sections 1.6.5., 4.5.13.1., and 5.5.1. of the HYDROGRAPHIC MANUAL.

5. JUNCTIONS

There are no contemporary junctional surveys within the limits of this survey. Charted hydrography in the junctional areas is in harmony with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrographic

FE No. 2 (1964) 1:10,000
H-4544a (1923-25) 1:10,000
H-8877 (1966) 1:5,000

The three (3) prior surveys listed above cover the present survey area in its entirety.

Prior survey FE No. 2 (1964) compares favorably with the present survey and shows a general trend of being one (1) to three (3) feet shoaler than present survey depths. Prior survey depths in the vicinity of Latitude 18°20'04"N, Longitude 64°57'04"W, are six (6) to nine (9) feet shoaler than present survey depths.

Prior survey H-4544a (1923-25) compares favorably with the present survey and shows a general trend of being one (1) to three (3) feet deeper than present survey depths. Prior survey depths in the following vicinities are seven (7) to fourteen (14) feet shoaler than present survey depths.

Latitude	Longitude
18°19'52"N	64°57'04"W
18°19'57"N	64°56'57"W
18°20'05"N	64°57'00"W

These differences in depths may be attributed to the dredging operations conducted in the present survey area.

Prior survey H-8877 (1966) compares favorably with the present survey and shows a general trend of being one (1) to two (2) feet shoaler than present survey depths. Bottom samples were brought forward from prior survey H-8877 (1966) to supplement present survey.

1) Thirty-five (35) and thirty-nine (39) foot soundings in Latitude 18°19'43.23"N, Longitude 64°57'13.73"W, and Latitude 18°19'44.07"N, Longitude 64°57'13.78"W, respectively, were not investigated by the hydrographer. Soundings on adjacent lines of hydrography on prior survey H-8877 (1966) show depths forty-one (41) to fifty-two (52)

feet. It is recommended these soundings be charted as portrayed on present survey.

2) A charted row of subm piles running from Latitude 18°19'37"N, Longitude 64°57'07"W to Latitude 18°19'44"N, Longitude 64'57'02"W originates with H-8877 (1966). The row of piles were neither verified nor disproved by the field unit. The charted row of subm piles were brought forward from prior survey H-8877 (1966) to supplement the present survey. It is recommended the charted row of subm piles be retained as charted.

3) A sunken wreck in Latitude 18°19'40"N, Longitude 64°57'04"W, which originates with H-8877 (1966), was neither verified nor disproved by the field unit. The sunken wreck was brought forward from prior survey H-8877 (1966) to supplement the present survey. The sunken wreck is not charted. It is recommended the sunken wreck be charted as portrayed on present survey unless the chart compiler can ascertain the authority for removal of this wreck from the chart. Removed per LNM: 28/77 JL

4) Land filling of approximately 150 meters seaward of the high water line, in the vicinity of three (3) piers in Latitude 18°20'03"N, Longitude 64°57'19"W has brought about a substantial change in the area. It is recommended that the area be charted as portrayed on present survey. See also photographs provided by Virgin Islands Port Authority. Photographs are appended to this report.

5) A pier in the vicinity of Latitude 18°20'04"N, Longitude 64°57'12"W has been reconstructed. The pier is now 110 meters shorter than shown on prior survey H-8877 (1966). It is recommended the pier be charted as portrayed on present survey. See also photographs appended to this report.

b. Wire Drag

H-4544b WD (1923-27) 1:10,000

The comparison with H-4544b WD (1923-27) and the present survey revealed seven (7) groundings that fall within the present survey area. The following should be noted:

1) The following groundings were not investigated by the field unit and are not presently charted.

Grounding Depth	Latitude	Longitude	Clearance Depth	Present Depth
27	18°20'11"N	64°56'56"W,	26	26
30	18°20'08"N	64°57'05"W	27	26-30
27	18°20'05"N	64°56'59"W	26	30-34
36	18°20'02"N	64°57'09"W,	36	33-40
34	18°19'59"N	64°57'04"W	34	38-41
36	18°19'37"N	64°57'16"W	34	36-39

2) A charted sounding, 36 foot grounding, cleared by 34 feet, in Latitude 18°19'41"N, Longitude 64°57'18"W, by prior survey H-4544b WD (1923-27), was not investigated by the field unit. The present survey depths in this area are 37 to 41 feet. It is recommended the 36 foot sounding be retained as charted.

The differences in depths between the present survey and prior surveys may be attributed to the advancement of survey technology; more accurate positioning systems and better sounding equipment.

Except as noted above the present survey is adequate to supersede the above prior surveys within the common area.

7. COMPARISON WITH CHART 25649 (13th Edition, 30 Aug 1980)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys which need no further consideration. Specific soundings discussed in section L., pages 3-4 of the Descriptive Report have charting recommendations and require no additional comments.

In addition to the recommendations in section L. of the Descriptive Report, the following should be noted:

1) AWOIS Items #1297 and #1298, charted dangerous sunken wrecks, PA, the 105 foot barge "DRAVO", and pleasure craft "VICTORY", in Latitude 18°19'48"N, Longitude 64°57'06"W, originate with 7th Coast Guard District, Local Notice to Mariners 5 of 1980 (LNM 5/80). The wrecks were searched for by the field unit with negative result. The hydrographer notes in section L., page 5, of the Descriptive Report, that the Virgin Islands Port Authority informed the Commanding Officer that the wrecks are within the dredge area and the area is clear. Phone calls to the Virgin Islands Port Authority in Charlotte Amalie, (809-774-2250), Corps of Engineers office in San Juan, Puerto Rico, (809-753-4688), and the 7th Coast Guard District, (809-774-1911), did not confirm this statement. The wrecks are in an area where extensive dredging has been performed. The fathograms were examined during office processing, and an uncharted obstruction was discovered in Latitude 18°19'44.88"N, Longitude 64°57'06.20"W, with an echo sounder least depth of 27 feet in present survey depths of 36 to 39 feet. The depth determined for this obstruction should not be considered the least depth. The AWOIS item is 96 meters north of the obstruction found on the present survey. It is recommended that the charted dangerous sunken wrecks, PA, be deleted. It is also recommended the an obstruction with a depth of 27 feet and a danger curve, (27 Obstr), be charted in present survey location. See also section 9. of this report.

Awois
MSM 2/19/87
ON ORIGINAL DOCUMENT

2) A charted rock in Latitude 18°19'48"N, Longitude 64°57'21"W was located by the field unit in Latitude 18°19'47.71"N, Longitude 64°57'21.30"W. The rock bares one (1) foot above the sounding datum. It is recommended that the rock be charted as portrayed on present survey.

3) The field unit discovered and subsequently investigated an uncharted visible wreck in Latitude 18°20'08.71"N, Longitude 64°56'40.69"W. The wreck bares above Mean High Water from four (4) to eight (8) feet. It is recommended that a hulk be charted as portrayed on present survey.

AWO15 MSM 2/19/87

4) The field unit discovered and subsequently investigated uncharted rocks in Latitude 18°20'10.23"N, Longitude 64°56'40.37"W, and Latitude 18°20'10.38"N, Longitude 64°56'38.28"W. The rocks bare one (1) foot above the sounding datum. It is recommended that the rocks be charted as portrayed on present survey.

5) The field unit discovered and subsequently investigated an uncharted wreck in Latitude 18°19'57.38"N, Longitude 64°57'19.96"W. The wreck is awash at the sounding datum. It is recommended that a wreck be charted as portrayed on present survey.

AWO15 MSM 2/19/87

The present survey is adequate to supersede the charted hydrography in the common area.

b. Aids to Navigation

The hydrographer located two (2) fixed aids and one (1) floating aid to navigation in the survey area. These aids appear adequate to serve their intended purposes

8. COMPLIANCE WITH INSTRUCTIONS

This survey complies with the Project Instructions except as noted in other sections of this report.

9. ADDITIONAL FIELD WORK

This is an adequate basic survey. Additional work is required to determine disposition of the uncharted 27 foot obstruction in Latitude 18°19'44.88"N, Longitude 64°57'06.20"W, and survey the area in the vicinity of Latitude 18°20'12"N, Longitude 64°57'00"W.

Reginald L. Keene
Cartographic Technician
Verification of Field Data

Norris A. Wike
Cartographer
Evaluation and Analysis

Leroy G. Cram
Senior Cartographic Technician
Verification Check

NOV 7, 1986

TO: ATLANTIC MARINE CENTER
HYDROGRAPHIC SURVEYS BRANCH

SUBJECT: DREDGING & WORKS IN WEST GREGERIE CHANNEL, ST THOMAS, VIRGIN ISLANDS

IN RESPONSE TO A PHONE CALL YESTERDAY FROM YOUR OFFICE, I AM SENDING ENCLOSED THE LATEST DATA I HAVE AVAILABLE CONCERNING WHAT HAS BEEN DREDGED, & WHAT HAS BEEN BUILT. DREDGED AREAS ARE AS REPORTED BY THE DREDGING COMPANY

RICHARD B GRIFFIN
CHIEF PILOT
ST. THOMAS, V.I.

Inspection Report
FE-279

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

Robert G. Roberson
Chief, Evaluation and Analysis Group
Hydrographic Surveys Branch

David B. MacFarland
Chief, Hydrographic Surveys Branch

Approved: 1 December 1986

Ray E. Moses, RADM, NOAA
Director, Atlantic Marine Center

Helicopter sightseeing and charter service

Inter-island sea plane service

Regional-commuter airline service

AVIATION DIVISION

CROWN BAY PORT

LOCATION: St. Thomas, U.S. Virgin Islands

EXISTING FACILITY: Cruise Ship Dock

Length of Dock: 800'
Draft: 38 feet
Lights · Parking · Water · Pedestrian Walkways · Taxi Service
Access Roads and sidewalks · Passenger Arrivals Bldg.

SCOPE OF PROJECT:

Phase I
- 3.3 acres commercial center
- 1.24 acres passenger terminal
- 3.4 acres warehousing/light industry
- 1.69 acres taxi parking

Phase II-A
- Dredging of Deep Water Channel
- Creation of 10 acre landfill for Cargo/Warehousing
- 650' Bulkhead for Cargo Vessels

Phase II-B
- 750' Dock for Cruise Ship
- 100 plus Pleasure Boat Marina

CRUZ BAY – ENIGHED POND

LOCATION: St. John, U.S. Virgin Islands

EXISTING FACILITY: Cruz Bay Ferryboat Dock (passenger)

Length of Dock: 150 feet
Depth Alongside: 11 feet
Lights · Landside Parking · Taxi Service

EXISTING FACILITY: Creek Area Dock (cargo)

Length of Dock: 400 feet
Depth Alongside: 10 feet
Lights · Landside Parking · Customs & Immigration Service
R/O-R/O facility

SCOPE OF PROJECT:

EnightedPond:
- Marina
- Dry storage
- Charter Boat Docks
- Cargo Area with Storage for Bulk Materials
- Park and Recreation Area

Photo by Ray Miles – Studio Five

CYRIL E. KING AIRPORT (Turn page for airport statistics)

ANNUAL STATISTICS – FIVE YEAR COMPARISONS

COMBINED TOTALS – ST. THOMAS AND ST. CROIX

	Landings	Pax In	Pax Out	Pounds Cargo In	Pounds Cargo Out
FY 1981	74,106	763,702	740,195	16,400,553	2,227,759
FY 1982	70,852	763,125	729,016	17,897,596	2,399,471
FY 1983	66,653	678,625	635,205	13,606,399	2,634,475
FY 1984	67,653	700,964	680,430	11,539,172	2,590,167
FY 1985	63,171	655,792	672,432	12,415,370	2,806,445

ALEXANDER HAMILTON AIRPORT – ST. CROIX

FY 1981	26,280	305,611	306,605	9,053,587	1,251,101
FY 1982	25,352	290,212	280,262	9,222,186	1,544,730
FY 1983	24,410	222,740	215,129	7,293,902	1,557,203
FY 1984	25,225	223,547	215,862	6,831,164	1,490,643
FY 1985	23,426	203,695	199,818	6,948,943	1,864,832

CYRIL E. KING AIRPORT – ST. THOMAS

FY 1981	47,826	458,091	433,590	7,346,966	976,658
FY 1982	45,500	472,913	448,754	8,675,410	854,741
FY 1983	42,243	455,885	420,076	6,312,497	1,077,272
FY 1984	42,428	477,417	464,568	4,708,008	1,099,524
FY 1985	39,745	452,097	472,614	5,466,427	941,613

CYRIL E. KING AIRPORT

LOCATION: St. Thomas, U.S. Virgin Islands

PRESENT RUNWAY & PARALLEL TAXIWAY: 5,358 ft.

HOURS OF OPERATION: 24 hours; ATC Tower, 7:00 A.M. to 10:30 P.M.

SERVED BY: Eastern, American, Pan Am, Midway Express, Liat, Crown Air, Virgin Air, Vieques Airlink, Air BVI, Aero Virgin Islands, Air Anguilla, V.I. International Airways, Eastern Metro, Executive Air, Windward Island Airways

DIRECT JET SERVICE FROM NEW YORK: American & Pan Am

DIRECT JET SERVICE FROM MIAMI: Eastern, Midway Express and Pan Am

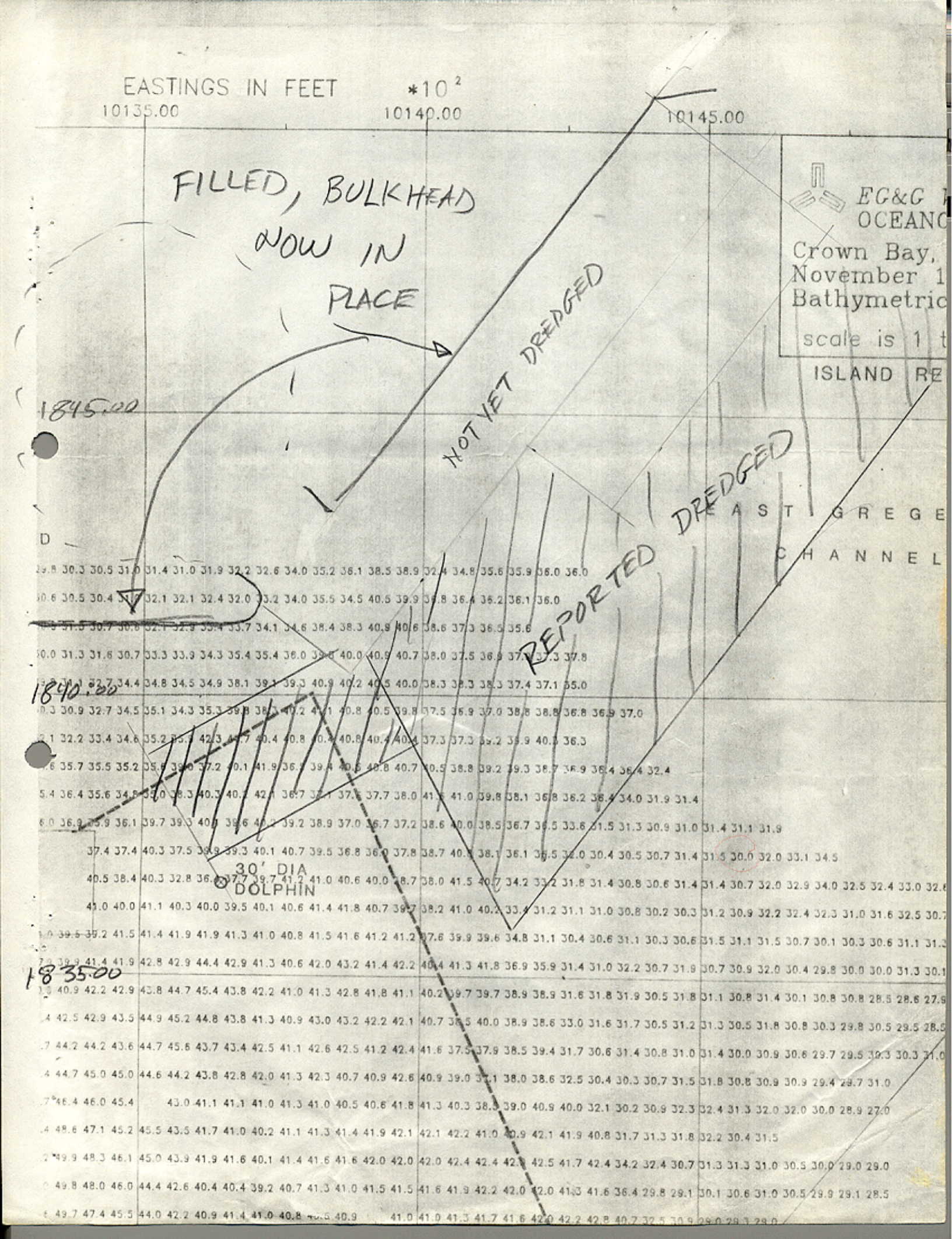
DIRECT JET SERVICE FROM DALLAS/FT. WORTH.: American

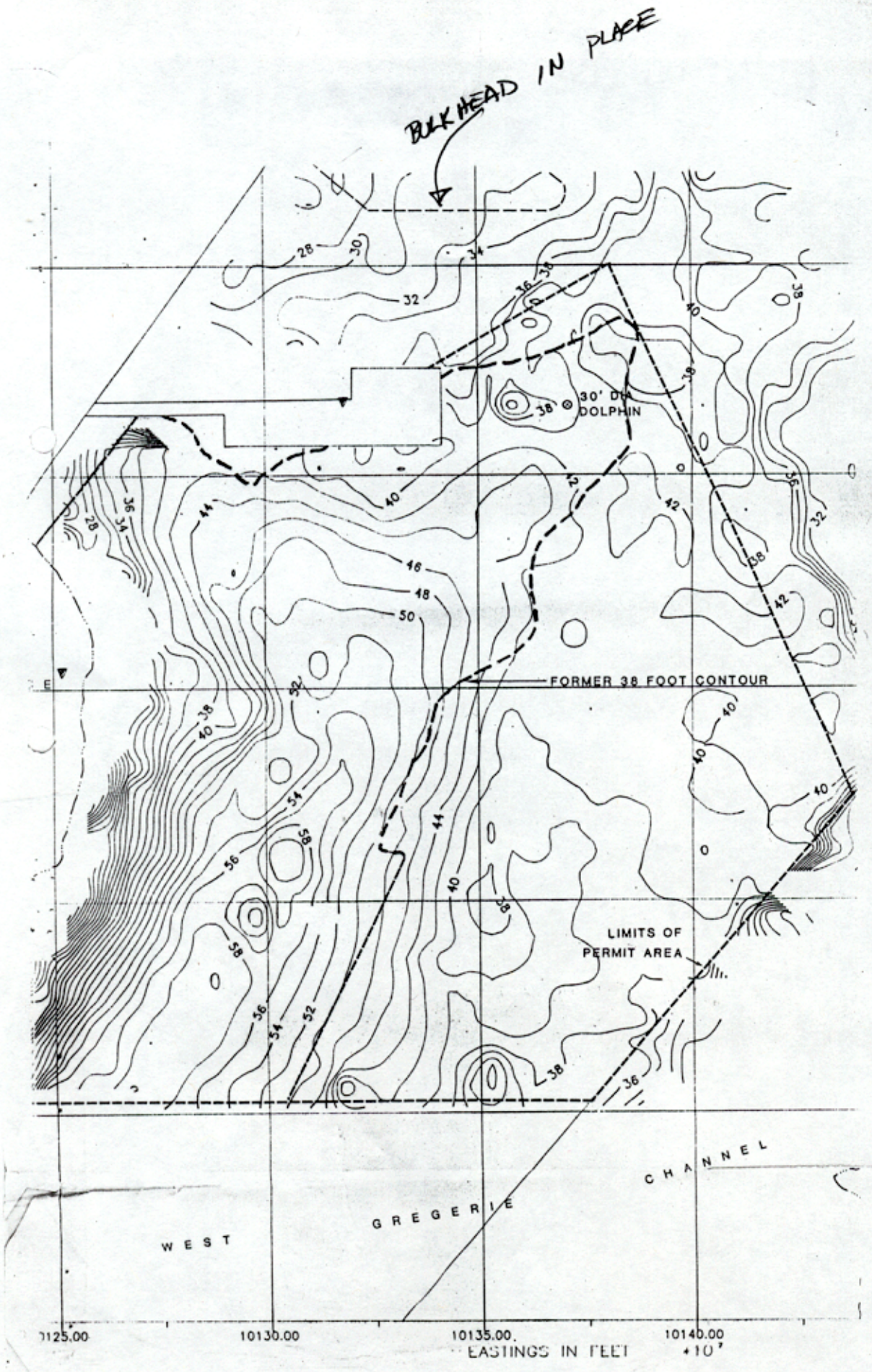
SCOPE OF PROJECT UNDER CONSTRUCTION:

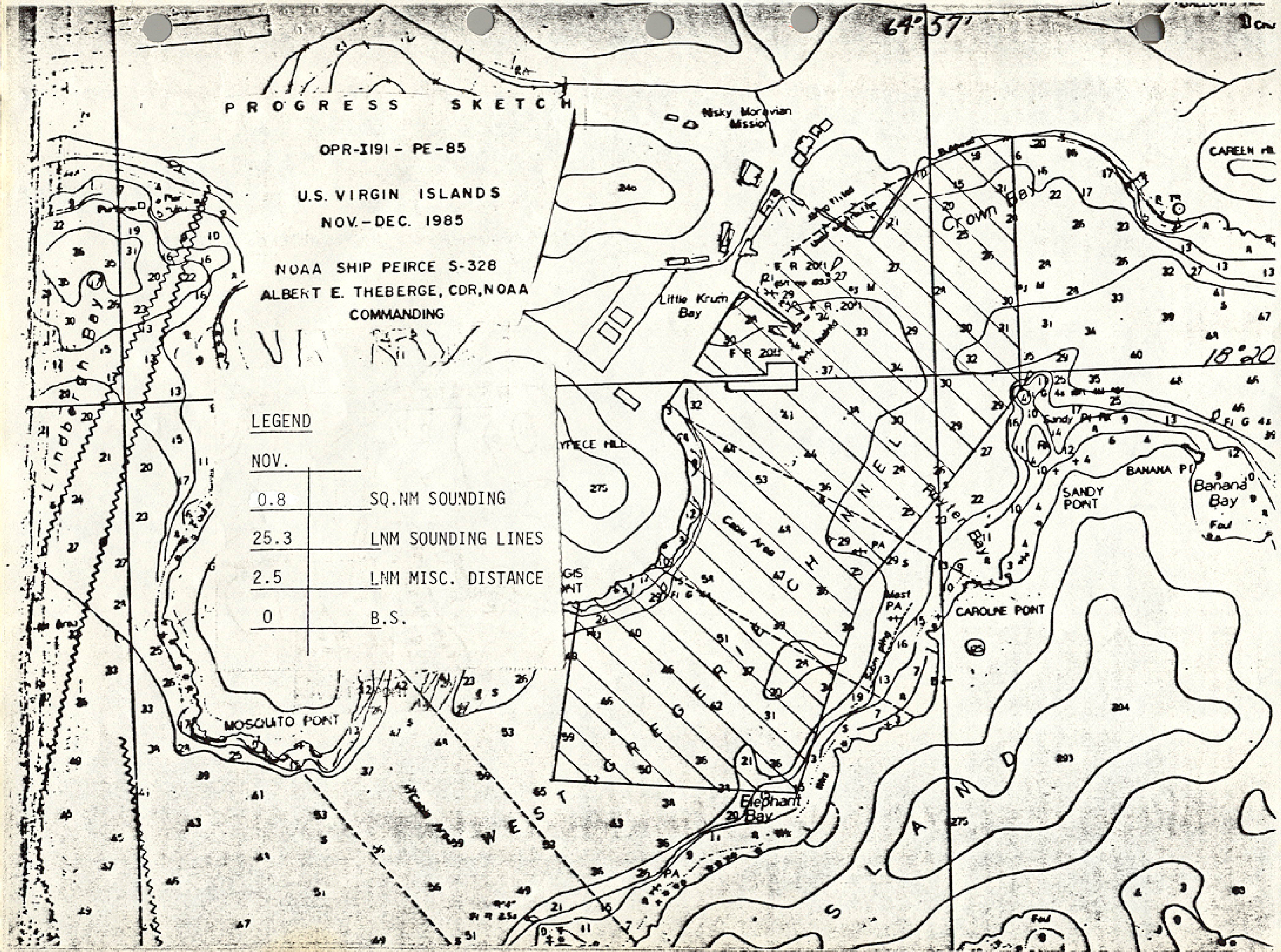
7,200' New Take-off and Landing Runway
7,000' New Taxiway
30,000 sq. ft. Cargo Building
160,000 sq. ft. Terminal Building
General Aviation Facilities
Fueling facilities

* **Runway Lengths Available/Cyril E. King Airport**

Rw-9, Landing Length – Night	4,658 ft.
Rw-9, Landing Length – Daytime	5,158 ft.
Rw-9, Takeoff Length – Night	4,658 ft.
Rw-9, Takeoff Length – Daytime	3,358 ft.
Rw-27, Landing Length – Night	4,658 ft.
Rw-27, Landing Length – Daytime	5,008 ft.
Rw-27, Takeoff Length – Night	4,658 ft.
Rw-27, Takeoff Length – Daytime	5,208 ft.


EASTINGS IN FEET *10²
10135.00
10140.00
10145.00
FILLED, BULKHEAD NOW IN PLACE
NOT YET DREDGED
REPORTED DREDGED
1845.00
1840.00
1835.00
30' DIA
DOLPHIN
EG&G
OCEANO
Crown Bay,
November 1
Bathymetric
scale is 1
ISLAND RE
EAST GREGE
CHANNEL


BULKHEAD IN PLACE
30' DIA DOLPHIN
FORMER 38 FOOT CONTOUR
LIMITS OF PERMIT AREA
CHANNEL
GREGERIE
WEST
10125.00
10130.00
10135.00
10140.00
EASTINGS IN FEET



PROGRESS SKETCH

OPR-I191 - PE-85

U.S. VIRGIN ISLANDS

NOV.-DEC. 1985

NOAA SHIP PEIRCE S-328

ALBERT E. THEBERGE, CDR, NOAA

COMMANDING

LEGEND

NOV.	
0.8	SQ.NM SOUNDING
25.3	LNM SOUNDING LINES
2.5	LNM MISC. DISTANCE
0	B.S.

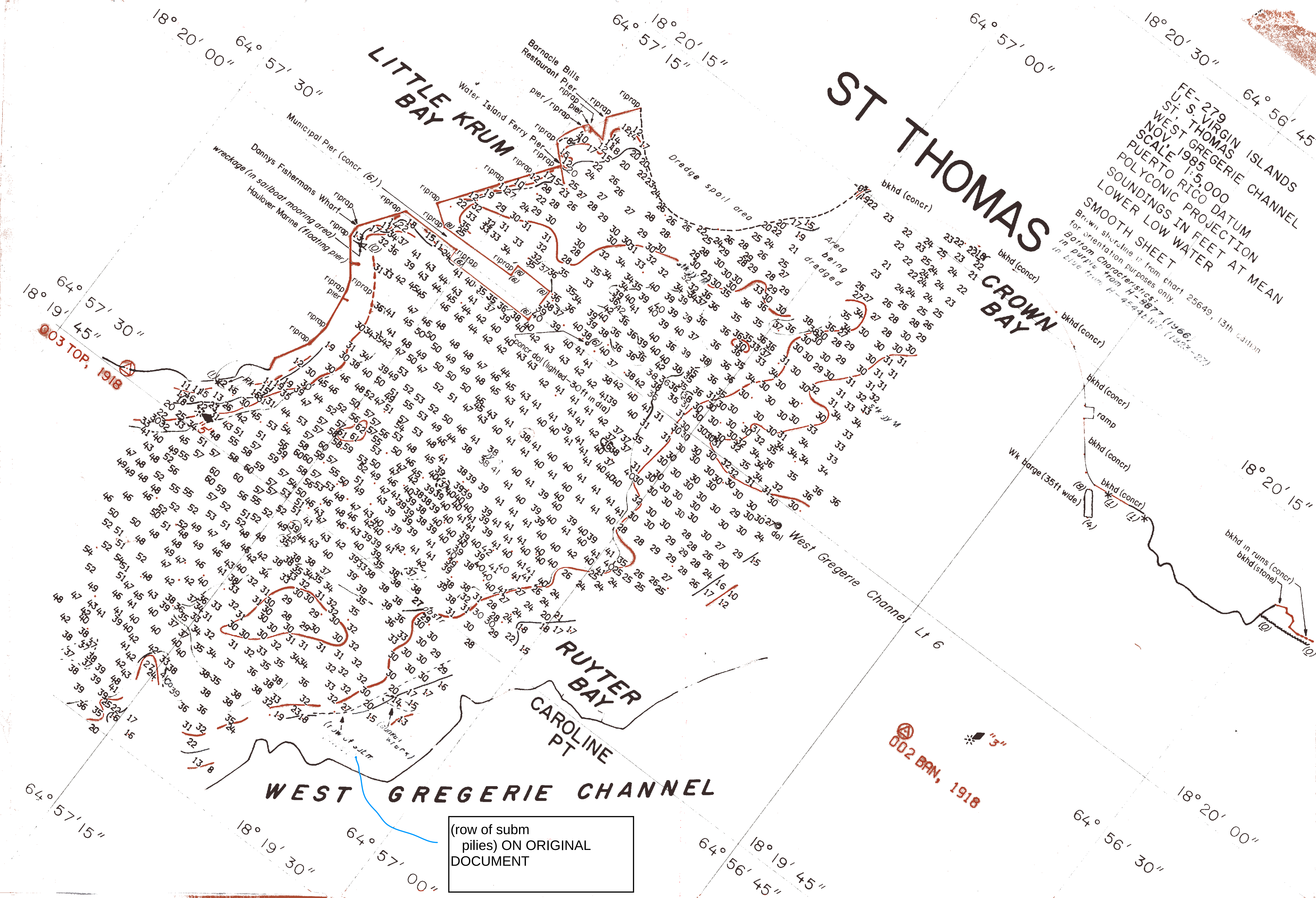
18° 20′ 00″
64° 57′ 30″
18° 20′ 15″
64° 57′ 15″
18° 20′ 30″
64° 57′ 00″
18° 20′ 30″
64° 56′ 45″
18° 19′ 45″
64° 57′ 30″
18° 19′ 45″
64° 57′ 15″
18° 19′ 30″
64° 57′ 00″
18° 20′ 00″
64° 56′ 30″
18° 20′ 15″
64° 56′ 30″

FE - 279
NOV., 1985
SCALE 1:5,000
POSITION OVERLAY

West Gregerie Channel Li 6

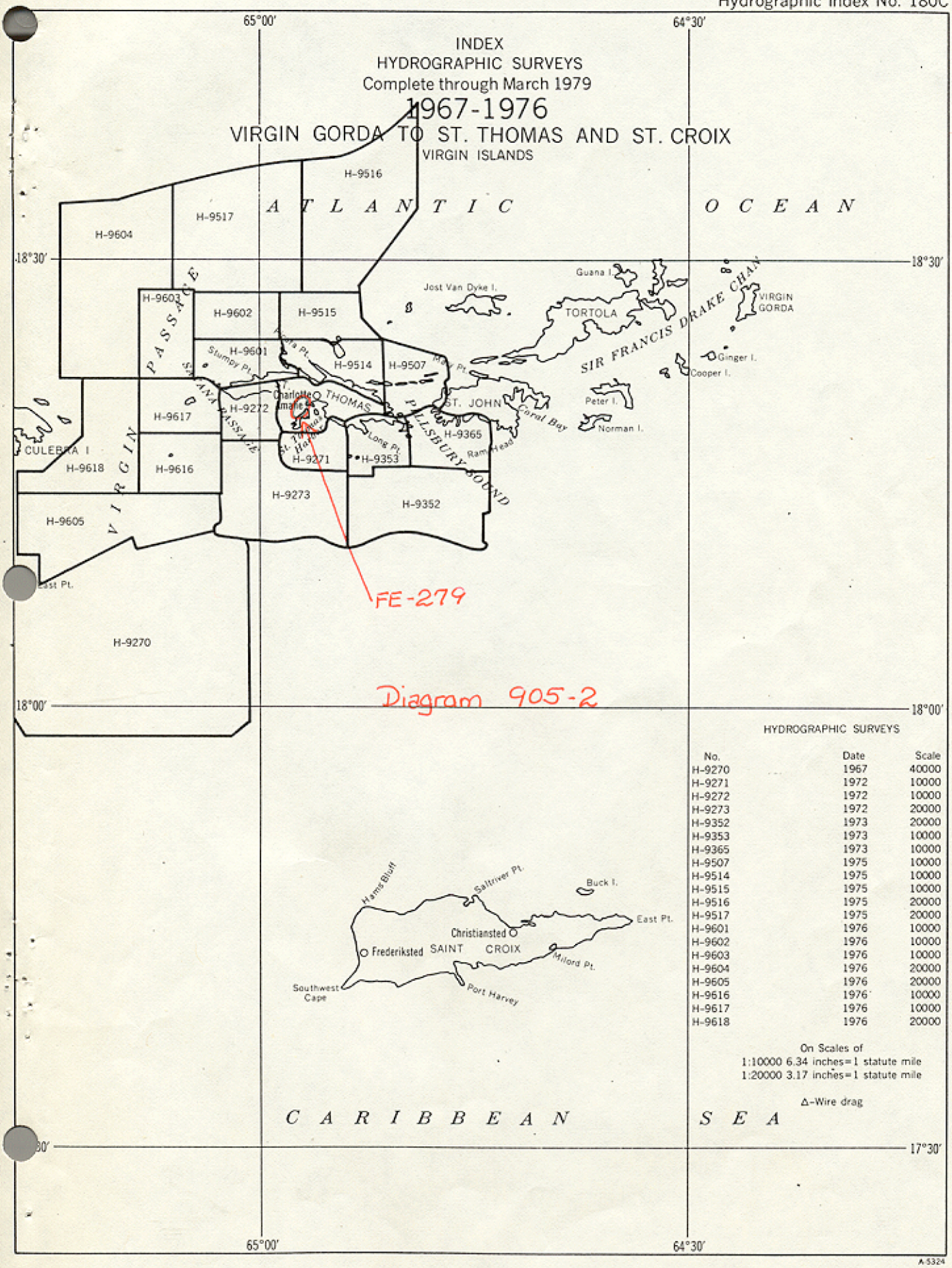
C 3 TOP, 1918

002 BAN, 1918


FE-279
U.S. VIRGIN ISLANDS
ST. THOMAS
WEST GREGERIE CHANNEL
NOV. 1985
SCALE 1:5,000
PUERTO RICO DATUM
POLYCONIC PROJECTION
SOUNDINGS IN FEET AT MEAN
LOWER LOW WATER
SMOOTH SHEET
Brown shoreline is from chart 25649, 13th edition
for orientation purposes only.
Bottom Characteristics:
in purple from H-9877 (1966)
in blue from H-4544WD (1923-27)
ST THOMAS
LITTLE BAY KRUM
CROWN BAY
RUYTER BAY
CAROLINE PT
WEST GREGERIE CHANNEL
West Gregerie Channel
Lt 6
Barnacle Bills Restaurant Pier
Water Island Ferry Pier
Municipal Pier (concr (6))
Dannys Fishermans Wharf
wreckage (in sailboat mooring area)
Haulover Marine (floating pier)
riprap
pier
pier / riprap
Dredge spoil area
Area being dredged
bkhd (concr)
ramp
Wk barge (35ft wide)
bkhd in ruins (concr)
bkhd (stone)
concr dol (lighted-30ft in dia)
dol
obstr
Rk
(sunken wreck)
(row of subm
003 TOP, 1918
002 BAN, 1918
"3"
"5"
18° 20′ 00″
64° 57′ 30″
18° 20′ 15″
64° 57′ 15″
64° 57′ 00″
18° 20′ 30″
64° 56′ 45″
18° 19′ 45″
18° 19′ 30″
64° 56′ 30″
(row of subm
pilies) ON ORIGINAL
DOCUMENT

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Washington, D.C.

Hydrographic Index No. 180C



HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-9270	1967	40000
H-9271	1972	10000
H-9272	1972	10000
H-9273	1972	20000
H-9352	1973	20000
H-9353	1973	10000
H-9365	1973	10000
H-9507	1975	10000
H-9514	1975	10000
H-9515	1975	10000
H-9516	1975	20000
H-9517	1975	20000
H-9601	1976	10000
H-9602	1976	10000
H-9603	1976	10000
H-9604	1976	20000
H-9605	1976	20000
H-9616	1976	10000
H-9617	1976	10000
H-9618	1976	20000

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

Δ-Wire drag

A-5324

NOAA FORM 75-96
(10-83)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. FE-279

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
25649	30Aug87	Shirell Kohl	Full [redacted] After Marine Center Approval Signed Via
			Drawing No. 16
25641	30Aug87	Shirell Kohl	Full ~~Part Before~~ After Marine Center Approval Signed Via
			Drawing No. 31 Revised topography only thru 25649
25650	30Aug87	Shirell Kohl	Full [redacted] After Marine Center Approval Signed Via
			Drawing No. 33
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
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			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED.

app'd to STds 2-10-87 pr